

REMARKS / DISCUSSION OF ISSUES

Claims 1-27 are pending in the application. Claims 1, 11, 13, 14, 26 and 27 are independent claims. The claims are not amended in view of art. Rather, amendments to the claims are made to correct potential issues noticed during the preparation of this Response.

I. Rejections under 35 U.S.C. § 102

Claims 1-10 and 14-25 are rejected under 35 U.S.C. § 102(b) as being anticipated by *McGrath, et al.* (U.S. Patent 5,192,503). For at least the reasons set forth herein, Applicants respectfully submit that this rejection is improper and should be withdrawn.

At the outset Applicants rely at least on the following standards with regard to proper rejections under 35 U.S.C. § 102. Notably, a proper rejection of a claim under 35 U.S.C. § 102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. *See, e.g., In re Paulsen*, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Alternatively, anticipation requires that each and every element of the claimed invention be embodied in a single prior art device or practice. *See, e.g., Minnesota Min. & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992). For anticipation, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *See, e.g., Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991).

i. Claim 1

Claim 1 is drawn to *an apparatus for separating an array slide from a gasket slide and features:*

a first substrate for contacting and attaching to the array slide;

*a second substrate for contacting and attaching to the gasket slide; and
means for separating the first substrate from said second substrate.*

In an embodiment, a first substrate 140 contacts and attaches to an array slide 110; and a second substrate 142 contacts and attaches to a gasket slide 125.

The Office Action directs Applicants to Fig. 6, items 50 and 12, for the alleged disclosure of features of claim 1, but fails to specify what item of *McGrath, et al.* corresponds to what feature of claim 1. For instance, in alleging anticipation of *a first substrate for contacting and attaching to the array slide* the Office Action directs attention to item 50 of Fig. 6. Yet, Applicants are left to ponder whether item 50 is allegedly the first substrate or the array slide. Similarly, Applicants are left to ponder whether item 12 is allegedly the second substrate or the gasket slide. As such, the Office Action fails to clearly articulate a rejection, and as such, the Office Action fails to comply with MPEP § 706.

Moreover, even if item 50 anticipated one of the first substrate or the array slide, the Office Action fails to recite at the very least, what item in *McGrath, et al.* allegedly anticipates the other of the first substrate or the array slide. Clearly one item of a reference cannot be applied to two features of a claim. Because the Office Action has failed to provide the alleged disclosure of at least one feature of claim 1, a *prima facie* case of anticipation has not been established. Thus, claim 1 is patentable over *McGrath, et al.* Claims 2-10, which depend from claim 1 directly or indirectly, are also patentable for at least the same reasons, and in view of their additionally recited subject matter.

ii. Claims 14-25

Claims 14-25 no longer depend from claim 1. Thus, the rejection in view of *McGrath, et al.* is moot. The patentability of these claims is addressed below.

II. Rejections under 35 U.S.C. § 103

Claims 11-13, 26 and 27 are rejected under 35 U.S.C. § 103 (a) as being unpatentable in view of *McGrath, et al.* and *Bippus, et al.* (U.S. Patent 3,448,510). For at least the reasons set forth herein, Applicants respectfully submit that this rejection is improper and should be withdrawn.

As stated in MPEP § 2143, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Furthermore, Applicants rely at least on the following standard of law as it relates to obviousness. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls. If a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid or unpatentable under § 103. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727; 82 U.S.P.Q.2D 1385 (2007), citing, in part *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

However, the Court in *KSR* continued: "A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See *Graham*, 383 U.S., at 36, 86 S. Ct. 684, 15 L. Ed. 2d 545 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "guard against slipping into the use of hindsight'" (quoting *Monroe*

Auto Equipment Co. v. Heckethorn Mfg. & Supply Co., 332 F.2d 406, 412 (CA6 1964))).” Moreover, if there is no suggestion to combine the teachings of the applied art, other than the use of Applicants’ invention as a template for its own reconstruction, a rejection for obviousness is improper. *Ex parte Crawford, et al.* Appeal 20062429, May 30, 2007.

i. Claim 11

Claim 11 is drawn to an apparatus for separating an array slide from a gasket slide. The apparatus features:

a first substrate for contacting the array slide;
a second substrate opposite the first substrate for contacting the gasket slide;
a first vacuum source associated with the first substrate for providing a first vacuum to the first substrate for attaching the first substrate to the array slide; and
a second vacuum source associated with the second substrate for providing a second vacuum to the second substrate for attaching the gasket slide to the second substrate.

The Office Action directs Applicants again to Fig. 6 of *McGrath, et al.* for the alleged disclosure of the first substrate, the array slide, the second substrate and the gasket slide. Notably, no specific reference characters from Fig. 6 are cited. Thus, the rejection fails to comply with MPEP § 706 as no clear articulation of the supposed correspondence of items in the reference to features of claim 1 is provided. Even if Applicants are correct in presuming that the items of *McGrath, et al.* cited in the rejection of claim 1 are again applied to features of claim 11, for at least the reason set forth in the traversal of the rejection of claim 1, the rejection of claim 11 also fails to comply with the basic tenets of MPEP § 706. Thus, the rejection of claim 11 is improper.

Moreover, assuming arguendo that the Office Action is relying on the same elements of *McGrath, et al.* as in the rejection of claim 1, by similar reasoning, even if item 50 sufficiently discloses one of the first substrate or the array slide, the Office

Action fails to recite at the very least, what item in *McGrath, et al.* allegedly anticipates the other of the first substrate or the array slide. Clearly one item of a reference cannot be applied to two features of a claim. Therefore, Applicants submit that for at least the reasons set forth above, a *prima facie* case of obviousness has not been established. Thus, claim 11 is patentable over *McGrath, et al.* and *Bippus, et al.*

In addition, and although supererogatory in view of the traversal of the rejection of claim 11, Applicants respectfully submit that the rejection is improper for at least the following reasons.

The Office Action concedes that the reference to *McGrath, et al.* fails to disclose the vacuum source featured in claim 1. In an attempt to cure this deficiency, the Examiner turns to *Bippus, et al.* Not only does *Bippus, et al.* fail to cure this deficiency, but also *Bippus, et al.* cannot be properly combined with *McGrath, et al.* in a rejection of claim 11 for at least the following reasons.

First, Applicants note that *Bippus, et al.* teaches use of a pedestal support 52 that moves up and down within an opening 53 under the control of a vacuum operated mechanism within a housing 51. Thus, the single vacuum is used to pneumatically raise and lower the pedestal support 52. By contrast, claim 11 features a first vacuum source and a second vacuum source. Moreover, the first vacuum source of claim 11 is *associated with the first substrate for providing a first vacuum to the first substrate for attaching the first substrate to the array slide*; and the second vacuum source of claim 11 is *associated with the second substrate for providing a second vacuum to the second substrate for attaching the gasket slide to the second substrate*. As should be appreciated, the first and second vacuum sources of claim 11 are not devices used to lower and raise an object as in *Bippus, et al.*, but rather components that provide a vacuum for attaching respective substrates to slides. Clearly, *Bippus, et al.* does not disclose or suggest the use of a vacuum source configured attaching substrates to slides and specifically recited in claim 11. Accordingly, even if properly combinable with *McGrath, et al.* in a rejection for obviousness, *Bippus, et al.* does not cure the

deficiencies of *McGrath, et al.* As such, because *Bippus, et al.* fails to disclose at least one feature of claim 11, a *prima facie* case of obviousness has not been established.

Second, the reference to *Bippus, et al.* relates to the breaking up of a semiconductor wafer into a plurality of dies. The pedestal vacuum is used in this effort along with other elements described in the reference (e.g., see columns 9 and 10 of *Bippus, et al.* for additional details). However, there is no description in *Bippus, et al.* of an apparatus for separation of slides as specifically claimed, and no suggestion of its use in such endeavors. Therefore, Applicants respectfully submit that in view of the disparity between the technical fields of micro arrays and semiconductor processing, but for the use of Applicants' claims as templates for their reconstruction, there would be no motivation to combine *McGrath, et al.* with *Bippus, et al.* Such a combination applied *ex post* reasoning and is thus wholly improper in assessing patentability. Accordingly, because the combination of *McGrath, et al.* and *Bippus, et al.* is not proper, a *prima facie* case of obviousness has not been established.

ii. Claim 12

Claim 12 is drawn to an apparatus for separating an array slide from a gasket slide. The apparatus features:

a first substrate for contacting the array slide;
a second substrate opposite the first substrate for contacting the gasket slide;
a vacuum source associated with the first substrate and second substrate for providing a first vacuum to the first substrate for attaching the first substrate to the array slide and a second vacuum to the second substrate for attaching the gasket slide to the second substrate.

The rejection of claim 12 is substantially identical to the rejection of claim 11. Applicants thus traverse the rejection of claim 12 on essentially the same grounds. Withdrawal of the rejection of claim 12 is respectfully requested.

iii. Claim 13

Claim 13 is drawn to an apparatus for separating an array slide from a gasket slide. The apparatus features:

a first substrate for contacting the array slide, the first substrate comprising a first means for attaching to the array slide;

a second substrate for contacting and attaching to the gasket slide the second substrate comprising a second means for attaching the second substrate to the gasket slide; and

means for separating said first substrate from said second substrate and concomitantly separating the array slide from the gasket slide.

As in the rejections of claims 11 and 12, the Office Action directs Applicants to Fig. 6 of *McGrath, et al.* for the alleged disclosure of the first substrate, the array slide, the second substrate and the gasket slide. Notably, no specific reference characters from Fig. 6 are cited. Thus, the rejection fails to comply with MPEP § 706 as no clear articulation of the supposed correspondence of items in the reference to features of claim 1 is provided. Even if Applicants are correct in presuming that the items of *McGrath, et al.* cited in the rejection of claim 1 are again applied to features of claim 11, for at least the reason set forth in the traversal of the rejection of claim 1, the rejection of claim 11 also fails to comply with the basic tenets of MPEP § 706. Thus, the rejection of claim 11 is improper.

Moreover, assuming arguendo that the Office Action is relying on the same elements of *McGrath, et al.* as in the rejection of claim 1, by similar reasoning, even if item 50 sufficiently discloses one of the first substrate or the array slide, the Office Action fails to recite at the very least, what item in *McGrath, et al.* allegedly anticipates the other of the first substrate or the array slide. Clearly one item of a reference cannot be applied to two features of a claim. Therefore, Applicants submit that for at least the reasons set forth above, a *prima facie* case of obviousness has not been established. Moreover, Applicants demur the Examiner's combination of *McGrath, et al.* and *Bippus, et al.* for the same reasons recited above. Thus, claim 13 is patentable over *McGrath, et*

al. and *Bippus, et al.* Furthermore, claims 14-25, which depend from claim 13, are patentable for at least the same reasons and in view of their additional subject matter.

iv. Claims 26

Claim 26 is drawn to a method of disassembling an array hybridization apparatus having a gasket slide contacting an array slide. The method features:

contacting a first substrate with a vacuum to the array slide;
contacting a second substrate with a vacuum to a gasket slide; and
separating the first substrate from the second substrate while also separating the gasket slide from the array slide.

The Office Action states: "Regarding Claims 26 & 27, McGrath, et al. teaches all of the claimed features of the array hybridization apparatus except for [sic] vacuum." The Office Action then turns to *Bippus, et al.* in an attempt to cure these deficiencies.

At the outset, Applicants emphasize that claim 26 is not an apparatus claim, but rather is a method claim. So, Applicants respectfully request consideration of each and every element of the method. Moreover, no clear articulation of the relevance of any portion of *McGrath, et al.* is provided. As a result, Applicants are left in the rather precarious position of having to review the applied art, and to surmise its relevance to the claimed subject matter. At the very least, Applicants are not provided with a rejection compliant with MPEP § 706 or with Rule 104. As such, the rejection is improper and should be withdrawn.

To the extent applicable, and in the interest of advancing prosecution, Applicants submit that for at least the reasons set forth above in the rebuttal of the rejections of claims 1, 11, 12 and 13, not only is the combination of *McGrath, et al.* and *Bippus, et al.* improper, but also, their combination fails to disclose at least one feature of claim 26.

v. Claim 27

Claim 27 is drawn to a method of disassembling an array hybridization apparatus having a gasket slide attached to an array slide. The method features:

*contacting a first substrate to an array slide attached to a gasket slide;
contacting a second substrate to the gasket slide; and
separating the first substrate from the second substrate while also separating the
gasket slide from the array slide.*

The rejections of claims 26 and 27 were combined in the Office Action. As such, Applicants rebuttal of the rejection of claim 27 is substantively identical to their rebuttal of the rejection of claim 26. Therefore, the rejection of claim 27 is improper and should be withdrawn.

III. Future Office Action

In many instances, Applicants have asserted that rejections were improper for failure to comply with MPEP § 706, or 37 C.F.R. § 1.104, or both. These shortcomings have in essence deprived Applicants of the opportunity to provide all necessary evidence of patentability at the earliest possible opportunity. As a result, Applicants respectfully submit that if a subsequent Office Action rejects any pending claim, this Office Action cannot be properly made final.

Conclusion

In view the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Agilent Technologies, Inc.

s/William S. Francos/

by: William S. Francos (Reg. No. 38,456)

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Volentine & Whitt, PLLC
Two Meridian Blvd.
Wyomissing, PA 19610
(610) 375-3513 (v)
(610) 375-3277 (f)